

## DISCRETE FOURIER TRANSFORM (DFT) WATERMARK

### ABSTRACT OF THE DISCLOSURE

A Discrete Fourier Transform watermark for use with digital images/video. A Y  
5 component of a Y, U(Cb), V(Cr) digital data stream representing color components of  
digital video is extracted as the digital data for embedding the watermark. The digital  
data is then scaled to a standard size. A Discrete Fourier Transform (DFT) is performed  
on the digital data, and a magnitude domain of the Discrete Fourier Transform is  
computed. The watermark is embedded into selected frequency bands of the computed  
10 magnitude domain of the Discrete Fourier Transform, thereby creating a watermarked  
magnitude domain. The selected frequency bands comprise one or more middle  
frequency bands, and the middle frequency bands comprise a band of circular rings of the  
magnitude domain. An inverse Discrete Fourier Transform is performed on the  
watermarked magnitude domain to reconstruct the digital data with the embedded  
15 watermark.

"Express Mail" mailing label number EV32995575345  
Date of Deposit AUGUST 6, 2003  
I hereby certify that this paper or fee is being de-  
posited with the United States Postal Service "Express Mail  
Post Office to Addressee" service under 37 CFR 1.10 on  
the date indicated above and is addressed to:  
Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

SUZIE MCCLAVE

(printed name)



(signature)